

Health Care

First Aid and Emergency Care

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Introduction

In most cases, when a Canine Officer recognizes the early signs of injury or sudden illness, it allows ample time to get help from a veterinarian. However, situations may sometimes arise when medical help is not available immediately, and the seriousness of the incident requires the Canine Officer to apply first aid to protect the life or health of the detector dog.

If you cannot find what you are looking for in this section, use *Table 3-3-1* to locate information about first aid related topics elsewhere in the manual.

TABLE 3-3-1: Location of First Aid Related Topics in the Manual

If you are looking for information about:	Then refer to the following:
Operational procedures for an injury or sudden illness	"Injury and Sudden Illness" on page-2-2-8
Places to contact in case of an incident	"Incident Contacts" on page-2-2-9
How to administer medication	"Administering Medication" on page-3-4-23
How to express anal glands	"Expressing Anal Glands" on page-3-5-7
Reverse sneezing	Table 3-4-6 on page-3-4-15
How to make an emergency Elizabethan collar	"Elizabethan Collar" on page-D-1-2
The contents of a first aid kit	"First Aid Kit" on page-D-1-8

Health Care: First Aid and Emergency Care

Physical Restraint

Most of the injuries and illnesses listed in this section are the most common ones encountered by working dog handlers; some are less common but extremely severe. The first aid instruction provided here is the most likely to save life, prevent further injury, and reduce pain. There are many valuable books, internet sites, and an increasing number of canine first aid seminars that provide current information about administering first aid. Also, consult your veterinarian if you wish to increase your knowledge.

The first action you should take in an emergency situation is a visual assessment of the victim. Use the "ABCS" method to remember the most important observations:

- ◆ Air: Are the airways (throat, mouth) clear? What is the respiratory rate and effort?
- ◆ Bleeding: Is there evidence of external or internal bleeding?
- ◆ Consciousness: Is the victim conscious? To what degree?
- ◆ Structural abnormalities: What is the position and movement of limbs?

In all emergency situations:

- ◆ Notify a veterinarian as soon as possible, with as much information as possible about the victim.
- Get help from anyone available.

Physical Restraint

- **1.** Calm the dog and immobilize it. Talk to the dog in a calm voice.
- 2. If the dog does not respond to your voice or touch because of pain and distress, you may wish to physically restrain the dog with a short tether or muzzle. Some dogs experiencing extreme pain and fear may bite, particularly if injuries are handled roughly. However, be aware that restraining some dogs with a muzzle greatly increases their fear and anxiety and they may struggle to free themselves from the muzzle, resulting in greater injury. The handler should assess whether restraint is absolutely necessary.
- **3.** If you must muzzle the dog, do the following:
 - **A.** Slide one hand down the leash and grab the collar where the leash attaches to the collar. Firmly hold the collar and leash clip.

- **B.** With your other hand, grab the leash just above where you are holding the collar and leash clip. Quickly wrap the leash around the dog's muzzle one or two times.
- **C.** After securing the leash around the dog's muzzle, put the end of the leash in the hand holding the collar. You should be holding the end of the leash from the wrapped muzzle, the leash clip, and the collar in one hand. This will keep the dog from getting out of the muzzle and will secure its head.
- **D.** When ready to release the dog from the muzzle, hold the end loop of the leash in your hand. Let go of the muzzle, leash and collar while standing up and stepping back. In this way you may avoid being bitten.



NEVER use a muzzle if the dog is showing any of the following symptoms:

- Overheating
- ◆ Injury in the head or neck area

◆ Vomiting

- ◆ Unconsciousness
- ◆ Difficulty breathing
- ◆ Shock

Bleeding

Bleeding can be external or internal (hemorrhage). Notify a veterinarian of any bleeding even if you feel it is minor, especially bleeding that results from a fight with another animal. Use *Table 3-3-2* for signs of and first aid for bleeding.

TABLE 3-3-2: Signs of and First Aid for Bleeding

If bleeding is:	Then use the following first aid:
External—Blood is flowing from an open wound; treat as external bleeding	 Apply direct pressure to the wound (particularly wounds in the dog's foot or leg, which bleed freely). Use a sterile bandage, a clean handkerchief, or pinch the wound edges together with your fingers. Apply a pressure bandage as soon as possible. Wrap the dog in a blanket or coat to keep it warm. Immediately take the dog to a veterinarian.
Internal—Bleeding from a body opening and/or there are signs of shock; treat as internal bleeding	 Wrap the dog in a blanket or coat to keep it warm. If necessary, cradle the dog to your body to help provide heat. Immediately take the dog to a veterinarian.

Bloating

Bloating

Bloating occurs when the dog's stomach fills with gas that cannot be adequately expelled. The stomach swells and may rotate within the abdomen until it is twisted and flipped upside down. This prevents blood flow to the lower abdomen and can cause shock. If not treated within approximately 30 minutes, this condition will result in the dog's death. Bloating may occur if a dog is fed too much at one time, if fed immediately before or after strenuous exercise, or if a dog is allowed to drink too much water too quickly immediately before or after exercise.

The one most important practice you can put into place to prevent bloating is to feed smaller meals more frequently (split daily ration into two portions, morning and evening). See *Table 3-3-3* for other precautions to prevent bloating. See *Table 3-3-4* for signs of and first aid for bloating.

TABLE 3-3-3: How to Prevent Bloating

To prevent bloating:	Then:
Before and after work	Do not feed within 2 hours.
	This does not affect the food used to reward a dog for task performance.
During exercise, training, or work	Give water in small amounts to prevent thirst.
After training	Give a minimal amount of water in a bucket. After 1 hour, fill the bucket up and allow the dog to drink as needed.
Before and after meals	Do not exercise the dog within 1 hour before and 2 hours after meals. Limit the amount of water for dogs who drink too much after eating. Soak food in warm water for 15-30 min. before feeding. This practice allows the food to expand outside of the dog's stomach.

TABLE 3-3-4: Signs of and First Aid for Bloating

Signs of bloating:	First aid for bloating:
 Swollen stomach just behind the ribs, primarily on the left side. Tapping stomach produces hollow "drum like" sound. 	Get help to transport the dog to a veterinarian IMMEDIATELY. Call in transit to inform the
 Unproductive attempts to vomit or have a bowel movement 	veterinarian that you have a bloat case en route and of your approximate time of arrival.
◆ Dog looks at stomach	approximate time of arrival.
 Retching, excessive drooling, and foaming at the mouth; dry heaves 	
◆ Restlessness, anxiety, whining, crying, pacing	
◆ Inability to get comfortable in any position	

Cold Injury

Identify the type of cold injury the dog has. See *Table 3-3-5* for signs of and first aid for a cold injury. Take the dog's temperature, pulse rate, respiration rate, and weight.

TABLE 3-3-5: Signs of and First Aid for Cold Injuries

Signs of cold injuries:	First aid for cold injuries:	
Hypothermia:	1. Provide warmth by wrapping the dog in blankets or	
◆ Body temperature is below	towels. If necessary, cradle the dog to your body to help provide heat.	
normal (less than 95°F taken rectally)	2. Take the dog to a veterinarian.	
◆ Shivering		
◆ Decreased pulse rate		
◆ Weakness		
◆ Unconsciousness		
◆ Shock		
Frostbite:	1. Provide warmth by wrapping the dog in blankets or	
◆ Exposure to extreme cold	towels. If necessary, cradle the dog to your body to help provide heat.	
◆ Affected tissues (ear tips, scrotum, tail, and limbs) may be reddened, pale, or scaly	2. Take the dog to a veterinarian.	

Foreign Objects in the Mouth

A dog may get a stick or other foreign object lodged in its mouth or throat. See *Table 3-3-6* for signs of and first aid for removing the foreign object.

TABLE 3-3-6: Signs of and First Aid for Foreign Objects in the Mouth

If the dog shows any of these signs:	And you:	Then administer this first aid:
◆ Coughing and gagging	Can see	1. Try to remove the object by
◆ Drooling	the foreign object	massaging the throat upward, as opposed to retrieving it from inside
◆ Pawing at mouth		the mouth.
◆ Difficulty swallowing		2. Get help from anyone available, if needed.
		3. Notify the veterinarian.
	Cannot see the object	Take the dog to a veterinarian.

Fractures

Fractures are one or more breaks in a bone. A fracture can be simple or compound. If the fracture is contained within the skin, it is a simple fracture. If it protrudes from the skin, it is a compound fracture.

First Aid for Fractures

1. Immediately restrain the dog to prevent further injury to the fractured area and to prevent possible injury to yourself.



Broken bones or fractures are potentially the most serious injuries since the dog will probably continue trying to move around. The dog must be physically restrained because its movement could increase the seriousness of the injury.

- 2. Keep the dog quiet and warm to prevent shock.
- **3.** Take the dog to a veterinarian.
- **4.** Before moving a dog with a fracture, apply a splint. Apply a splint to the fractured area to immobilize it and to prevent further injury. See the following directions.



Do not try to splint fractures that are close to the dog's body.

Do not try to reset a broken bone.

How to Splint a Fracture

1. Place the limb against a rolled newspaper, piece of wood, or any stiff material at hand. Secure limb to splint with gauze, a leash, or similar material.



If the fracture is compound (bone protrudes from the skin), then cover the area with a sterile gauze bandage before applying a splint. Take the dog to a veterinarian.

- **2.** Fasten the splint above and below the fracture.
- **3.** Apply the splint firmly but not so tight that the pressure stops the blood flow.
- **4.** If you cannot splint the fracture, move the dog onto a firm platform made from strips of board or sheets of plywood large enough for the dog to lie comfortably.

Overheating

Overheating (hyperthermia) results when a dog is unable to eliminate body heat rapidly enough. It is caused by any of the following conditions:

- ◆ Hot external conditions (especially hot (95°F) and humid)
- ◆ Over-excitement
- ♦ Over-exertion
- Being physically unfit

To prevent overheating in hot weather, limit training and exercise and allow frequent breaks. To prevent overheating while traveling, provide adequate ventilation.

When a detector dog becomes overheated, the Canine Officer must take immediate action to save the dog's life. Refer to *Table 3-3-7* for signs of and first aid for overheating. The dog cannot return to work until released by a veterinarian.



NEVER leave a dog in an unattended vehicle in hot weather, even if the vehicle is air conditioned. Interior vehicle temperatures can rise by more than 30 degrees in 30 minutes. If for some reason the vehicle stops running, the air conditioner will stop cooling. **This may result in the dog's death!**

TABLE 3-3-7: Signs of and First Aid for Overheating (Hyperthermia)

Signs of overheating:	First aid for overheating:
◆ Heavy panting	Lower the body temperature gradually:
◆ Unresponsiveness to commands	 a. Remove the dog from the heat, if possible (into shade, into air conditioned area).
 Weakness or unsteady gait; unwillingness to move 	b. Spray or splash lukewarm water on the dog's body and increase air flow over the dog.c. Place ice packs wrapped in towels between the
◆ Vomiting, diarrhea	dog's rear legs.
 Convulsions, seizures, and collapse 	2. Take the dog to a veterinarian, even if it appears that the dog has recovered.
◆ Elevated body temperature (105°F or higher)	
◆ Rapid pulse	
 Bright red gums (may turn pale if the dog goes into shock) 	



Do NOT submerge a heat exhausted dog in cold water or ice. This actually increases core temperature by constricting peripheral blood vessels.

Poisoning

Poisoning

Careful control of a detector dog should prevent it from ingesting harmful items. Do not place poisonous products where the dog can find them. Poisons used for rodent and insect control around kennels should be applied only under the direction of a veterinarian.

Dogs may be poisoned by many different things in the environment. These include: chemicals, such as insecticides, cleaning solutions, and antifreeze; plants, such as seeds, bark, and leaves; and animals, such as snakes, toads, and salamanders.

The signs of poisoning vary. They may include:

- Drooling
- Vomiting
- ◆ Fatigue in combination with the above two points
- ♦ Convulsions
- ◆ Severe diarrhea soon after ingesting poison
- Witnessing consumption of poison



Unless you are certain that a dog has eaten poison, do not treat for poisoning.



Do not attempt any first aid without contacting either the National Animal Poison Control Center (NAPCC) or the veterinarian.

First Aid for Poisoning

The following directions are provided along with other information by the National Animal Poison Control Center (NAPCC) at their web site at: http://www.napcc.aspca.org.

- **1.** Take 30–60 seconds to safely collect and have at hand the poison involved.
- **2.** Keep the dog quiet and warm to prevent shock.
- **3. Take the dog to a veterinarian immediately.** Be sure to take with you in a plastic, zip-lock bag any product container and any material the dog may have vomited or chewed.



Identification of the poison is the most important information for proper diagnosis and treatment.

- **4.** If you know what the dog has eaten, call local management as soon as possible and have them call NAPCC at either of the following numbers:
 - ❖ 1–900–680–0000 (phone number will be billed)
 - ♦ 1–800–548–2423 (have credit card ready to provide billing information)

When the call is made to NAPCC be ready to give:

- ❖ Your name, address, and telephone number
- Credit card number for fee charged
- ❖ Information concerning the exposure—the amount of poison, the time since exposure, etc.
- ❖ Species, breed, age, sex, weight of dog; other animals involved
- Poison to which the dog was exposed
- ❖ Problems and symptoms that the dog is experiencing

Seizures

Seizures happen when there is a sudden disturbance in brain function. When a dog has a seizure, it appears to lose control of its body. Seizures may be caused by low blood sugar, liver disease, lack of oxygen, infection, poison, or brain tumors. If the seizures recur, the condition is known as epilepsy.

The warning signs depend on the severity of the seizure. If it is a mild seizure, signs may include:

- Staring blankly, acting blind
- ♦ Walking in circles, chasing the tail, "snapping at the air"
- Mild twitching
- Stiffening of muscles
- Showing behavior changes

If the seizure is more severe, the signs may include:

- ◆ Collapsing
- Twitching or shaking
- ◆ Arching the back, flailing the legs
- ◆ Trance-like state
- ◆ Urinating or defecating without apparent control
- Salivating excessively
- ◆ Rolling the eyes

First Aid for Seizures

1. Remain calm. Most seizures are not life threatening.



Avoid putting your fingers near the dog's mouth. Dogs rarely choke on their tongues. Do not attempt to hold your dog's mouth open or closed. Do not put anything in its mouth.

- **2.** If your dog is having a mild seizure, try to gain its attention. This action might prevent a severe seizure from developing.
- **3.** If a severe seizure has developed, continuing for more than a minute, clear all objects away from the dog, wrap it in a blanket, and surround it with cushions to prevent the dog from injuring itself.
- **4.** After the seizure, keep the dog calm and confined. Unwrap the blanket from the dog. Leaving it wrapped can lead to hyperthermia (overheating).

- **5.** Immediately take the dog to a veterinarian.
- **6.** Note the following about the seizure:
 - **❖** The time it occurred
 - Length of the seizure
 - Number of hours after a meal
 - ❖ What the dog was doing before the seizure
 - ❖ Anything unusual that preceded the seizure



Notify your RCPC and local management immediately regarding the seizure.

Shock

Shock is failure of the peripheral circulatory system and leads to the collapse of the cardiovascular system. Shock can be caused by bleeding, intense pain, heart failure, vomiting, diarrhea, twisted stomach, bites, poisoning, severe disease, or many other injuries, illnesses, and accidents. When there is injury to internal organs, internal bleeding may occur and the dog may go into shock. Whatever the emergency, always look for signs of shock. See *Table 3-3-8* for signs of and first aid for shock.

TABLE 3-3-8: Signs of and First Aid for Shock

Signs of shock:	First aid for shock:
◆ Pale or light pink gums	1. Wrap the dog in a blanket or
◆ Glassy look in the eyes	coat to keep it warm. If necessary, cradle the dog to
◆ Dilated pupils	your body to help provide heat.
◆ Low body temperature	2. Get help at once. If it is
◆ Cool extremities (nose, lips, feet)	necessary to move the dog, use a litter.
◆ Rapid, shallow breathing of over 30 breaths/minute	3. Immediately take the dog to a
◆ Rapid heartbeat of over 150 beats/minute	veterinarian.
◆ Restlessness, confusion, or anxiety	

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Shock